

$$S_6(\mathbf{3}) \pmod{3}$$

	blocks	defect	matrix
$G :$	1 2	9 0	73×14 $19683_1 = \chi_{74}, \varphi_{15}$
$2.G :$	3	9	67×12

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$13_1 = \chi_2$	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$13_2 = \chi_3$	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$78_1 = \chi_4$	.	.	1	1	.	.	.	.	.	.	.	.	.	.
$91_1 = \chi_5$	1	.	.	.	.	1	.	.	.	.	.	.	.	.
$91_2 = \chi_6$	1	.	.	.	.	1	.	.	.	.	.	.	.	.
$105_1 = \chi_7$	.	.	1	.	1	.	.	.	.	.	.	.	.	.
$168_1 = \chi_8$	.	.	1	1	.	1	.	.	.	.	.	.	.	.
$195_1 = \chi_9$	.	.	1	.	1	1	.	.	.	.	.	.	.	.
$273_1 = \chi_{10}$	.	.	.	.	1	.	1	.	.	.	.	.	.	.
$273_2 = \chi_{11}$	.	.	.	.	1	.	1	.	.	.	.	.	.	.
$455_1 = \chi_{12}$	1	3	.	1	.	.	.	1	.	.	.	.	.	.
$455_2 = \chi_{13}$	1	3	.	1	.	.	.	1	.	.	.	.	.	.
$546_1 = \chi_{14}$	2	3	.	1	.	1	.	1	.	.	.	.	.	.
$546_2 = \chi_{15}$	2	3	.	1	.	1	.	1	.	.	.	.	.	.
$728_1 = \chi_{16}$	1	3	.	1	1	.	1	1	.	.	.	.	.	.
$728_2 = \chi_{17}$	1	3	.	1	1	.	1	1	.	.	.	.	.	.
$819_1 = \chi_{18}$	1	.	1	.	1	1	.	.	.	1	.	.	.	.
$1170_1 = \chi_{19}$	2	5	.	2	1	.	1	2	.	.	.	.	.	.
$1170_2 = \chi_{20}$	2	5	.	2	1	.	1	2	.	.	.	.	.	.
$1365_1 = \chi_{21}$	1	4	.	3	.	.	1	1	1	.	.	.	.	.
$1365_2 = \chi_{22}$	1	4	.	3	.	.	1	1	1	.	.	.	.	.
$1365_3 = \chi_{23}$	3	3	1	1	1	2	.	1	.	1	.	.	.	.
$1365_4 = \chi_{24}$	3	3	1	1	1	2	.	1	.	1	.	.	.	.
$1365_5 = \chi_{25}$	.	2	1	1	.	.	.	1	.	.	1	.	.	.
$1365_6 = \chi_{26}$	.	2	1	1	.	.	.	1	.	.	1	.	.	.
$1820_1 = \chi_{27}$	4	6	1	2	1	2	.	2	.	1	.	.	.	.
$1820_2 = \chi_{28}$	4	6	1	2	1	2	.	2	.	1	.	.	.	.
$1820_3 = \chi_{29}$	4	6	1	2	1	2	.	2	.	1	.	.	.	.
$2106_1 = \chi_{30}$	3	7	1	4	1	2	1	2	1	.	.	.	.	.
$2184_1 = \chi_{31}$	1	2	2	1	1	1	.	1	.	1	1	.	.	.
$2184_2 = \chi_{32}$	1	2	2	1	1	1	.	1	.	1	1	.	.	.
$2457_1 = \chi_{33}$	3	5	.	1	.	1	.	2	.	1	1	.	.	.
$2457_2 = \chi_{34}$	3	7	.	3	1	1	.	2	.	.	.	1	.	.
$2457_3 = \chi_{35}$	3	7	.	3	1	1	.	2	.	.	.	1	.	.
$2730_1 = \chi_{36}$	3	7	.	3	2	1	1	2	.	.	.	1	.	.
$2835_1 = \chi_{37}$	1	6	2	4	1	.	1	2	1	.	1	.	.	.
$3640_1 = \chi_{38}$	2	6	1	3	2	1	1	2	.	.	1	1	.	.
$3640_2 = \chi_{39}$	2	6	1	3	2	1	1	2	.	.	1	1	.	.
$4095_1 = \chi_{40}$	.	2	2	2	2	1	1	1	.	.	2	1	.	.

(Block 1:)	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}
$4095_2 = \chi_{41}$	.	2	2	2	2	1	1	1	.	.	2	1	.	.
$4536_1 = \chi_{42}$	2	3	1	1	3	2	1	2	.	1	.	.	1	.
$5265_1 = \chi_{43}$	.	2	2	1	3	.	1	2	.	1	1	.	1	.
$5460_1 = \chi_{44}$	1	4	2	3	4	1	2	2	1	1	.	.	1	.
$5460_2 = \chi_{45}$	6	12	2	5	3	3	1	4	.	1	1	1	.	.
$5460_3 = \chi_{46}$	6	12	2	5	3	3	1	4	.	1	1	1	.	.
$5460_4 = \chi_{47}$	6	12	2	5	3	3	1	4	.	1	1	1	.	.
$5824_1 = \chi_{48}$	3	8	3	4	3	2	1	3	.	1	2	1	.	.
$5824_2 = \chi_{49}$	3	8	3	4	3	2	1	3	.	1	2	1	.	.
$5824_3 = \chi_{50}$	3	8	3	4	3	2	1	3	.	1	2	1	.	.
$6552_1 = \chi_{51}$	3	9	2	5	3	2	1	3	.	.	2	2	.	.
$6552_2 = \chi_{52}$	3	9	2	5	3	2	1	3	.	.	2	2	.	.
$7371_1 = \chi_{53}$	3	9	3	5	4	2	2	4	1	1	1	.	1	.
$7371_2 = \chi_{54}$	3	9	3	5	4	2	2	4	1	1	1	.	1	.
$8190_1 = \chi_{55}$	1	7	.	5	2	.	2	2	1	.	.	1	.	1
$9477_1 = \chi_{56}$	1	6	4	5	4	3	1	2	.	.	4	3	.	.
$9477_2 = \chi_{57}$	1	6	4	5	4	3	1	2	.	.	4	3	.	.
$10920_1 = \chi_{58}$	4	12	2	7	3	2	2	4	1	1	1	1	.	1
$10920_2 = \chi_{59}$	4	12	2	7	3	2	2	4	1	1	1	1	.	1
$11648_1 = \chi_{60}$	5	15	2	8	4	2	3	5	1	1	1	1	.	1
$11648_2 = \chi_{61}$	5	15	2	8	4	2	3	5	1	1	1	1	.	1
$11648_3 = \chi_{62}$	5	15	2	8	4	2	3	5	1	1	1	1	.	1
$12285_1 = \chi_{63}$	6	13	4	6	4	4	1	5	.	2	2	1	.	1
$12285_2 = \chi_{64}$	6	13	4	6	4	4	1	5	.	2	2	1	.	1
$14560_1 = \chi_{65}$	6	18	3	10	5	3	3	6	1	1	2	2	.	1
$14560_2 = \chi_{66}$	6	18	3	10	5	3	3	6	1	1	2	2	.	1
$14560_3 = \chi_{67}$	6	18	3	10	5	3	3	6	1	1	2	2	.	1
$16380_1 = \chi_{68}$	5	16	4	10	7	3	4	6	2	2	1	1	1	1
$16640_1 = \chi_{69}$	2	14	4	10	7	1	5	6	2	1	2	1	1	1
$16640_2 = \chi_{70}$	13	26	4	11	6	6	2	9	.	3	2	2	.	1
$17472_1 = \chi_{71}$	7	17	4	8	7	4	3	7	1	3	2	1	1	1
$17920_1 = \chi_{72}$	8	23	3	12	7	4	5	9	2	2	1	1	1	1
$17920_2 = \chi_{73}$	7	18	6	10	7	5	2	6	.	2	4	3	.	1

$$\begin{array}{ll}
\varphi_1 = 1_1 & \varphi_8 = 358_1 \\
\varphi_2 = 13_1 & \varphi_9 = 594_1 \\
\varphi_3 = 21_1 & \varphi_{10} = 623_1 \\
\varphi_4 = 57_1 & \varphi_{11} = 903_1 \\
\varphi_5 = 84_1 & \varphi_{12} = 1302_1 \\
\varphi_6 = 90_1 & \varphi_{13} = 2457_1 \\
\varphi_7 = 189_1 & \varphi_{14} = 4655_1
\end{array}$$

Block 3:	φ_{16}	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}
$14_1 = \chi_{75}$	.	1	.	.	.	.	.	.	.	.	.	.
$14_2 = \chi_{76}$	.	1	.	.	.	.	.	.	.	.	.	.
$182_1 = \chi_{77}$	1	.	1	1	.	.	.	.	.	.	.	.
$182_2 = \chi_{78}$	1	.	1	1	.	.	.	.	.	.	.	.
$182_3 = \chi_{79}$	1	.	1	1	.	.	.	.	.	.	.	.
$364_1 = \chi_{80}$	.	2	1	.	.	1	.	.	.	.	.	.
$364_2 = \chi_{81}$	.	2	1	.	.	1	.	.	.	.	.	.
$520_1 = \chi_{82}$	.	2	1	1	.	.	1	.	.	.	.	.
$546_3 = \chi_{83}$	.	1	.	.	1	.	1	.	.	.	.	.
$546_4 = \chi_{84}$	.	1	.	.	1	.	1	.	.	.	.	.
$910_1 = \chi_{85}$	.	3	1	.	1	1	1	.	.	.	.	.
$910_2 = \chi_{86}$	.	3	1	.	1	1	1	.	.	.	.	.
$1092_1 = \chi_{87}$	1	3	2	1	1	1	1	.	.	.	.	.
$1092_2 = \chi_{88}$	1	4	3	.	1	1	.	1	.	.	.	.
$1092_3 = \chi_{89}$	1	4	3	.	1	1	.	1	.	.	.	.
$1092_4 = \chi_{90}$	1	3	2	1	1	1	1	.	.	.	.	.
$1092_5 = \chi_{91}$	1	3	2	1	1	1	1	.	.	.	.	.
$1260_1 = \chi_{92}$	.	4	2	.	1	2	1	.	.	.	.	.
$1260_2 = \chi_{93}$	.	4	2	.	1	2	1	.	.	.	.	.
$1820_4 = \chi_{94}$	1	3	2	1	.	1	.	.	1	.	.	.
$1820_5 = \chi_{95}$	1	3	2	1	.	1	.	.	1	.	.	.
$2730_2 = \chi_{96}$	2	3	3	2	.	1	.	1	.	1	.	.
$2730_3 = \chi_{97}$	1	6	3	1	1	2	1	.	1	.	.	.
$2730_4 = \chi_{98}$	2	3	3	2	.	1	.	1	.	1	.	.
$2730_5 = \chi_{99}$	2	3	3	2	.	1	.	1	.	1	.	.
$2730_6 = \chi_{100}$	1	6	3	1	1	2	1	.	1	.	.	.
$2730_7 = \chi_{101}$	1	6	3	1	1	2	1	.	1	.	.	.
$3120_1 = \chi_{102}$	2	4	3	1	1	2	.	1	.	1	.	.
$3276_1 = \chi_{103}$	2	4	3	2	.	1	.	.	2	.	.	.
$3276_2 = \chi_{104}$	2	4	3	2	.	1	.	.	2	.	.	.
$3640_3 = \chi_{105}$	2	6	4	2	1	2	1	1	.	1	.	.
$3640_4 = \chi_{106}$	2	6	4	2	1	2	1	1	.	1	.	.
$4368_1 = \chi_{107}$	2	6	4	2	.	2	.	1	1	1	.	.
$4368_2 = \chi_{108}$	2	6	4	2	.	2	.	1	1	1	.	.
$4368_3 = \chi_{109}$	2	6	4	2	.	2	.	1	1	1	.	.
$4914_1 = \chi_{110}$	.	6	3	1	1	2	1	.	.	.	1	.
$4914_2 = \chi_{111}$	.	6	3	1	1	2	1	.	.	.	1	.
$5460_5 = \chi_{112}$	.	7	3	1	2	2	2	.	.	.	1	.
$5460_6 = \chi_{113}$	3	9	6	3	1	3	1	1	1	1	.	.
$5460_7 = \chi_{114}$	3	9	6	3	1	3	1	1	1	1	.	.

(Block 3:)	φ_{16}	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}
$5824_4 = \chi_{115}$	3	11	7	3	1	4	1	1	1	1	.	.
$5824_5 = \chi_{116}$	3	11	7	3	1	4	1	1	1	1	.	.
$5824_6 = \chi_{117}$	3	11	7	3	1	4	1	1	1	1	.	.
$7280_1 = \chi_{118}$	4	12	8	4	1	4	1	1	2	1	.	.
$7280_2 = \chi_{119}$	4	12	8	4	1	4	1	1	2	1	.	.
$7280_3 = \chi_{120}$	4	12	8	4	1	4	1	1	2	1	.	.
$8190_2 = \chi_{121}$	2	10	6	3	1	3	1	.	2	.	1	.
$8190_3 = \chi_{122}$	2	10	6	3	1	3	1	.	2	.	1	.
$9828_1 = \chi_{123}$	5	14	9	6	1	5	2	1	2	2	.	.
$9828_2 = \chi_{124}$	5	14	9	6	1	5	2	1	2	2	.	.
$10206_1 = \chi_{125}$	4	10	7	5	.	2	.	.	4	.	1	.
$10206_2 = \chi_{126}$	4	10	7	5	.	2	.	.	4	.	1	.
$10920_3 = \chi_{127}$	3	16	9	4	3	5	3	1	1	1	1	.
$10920_4 = \chi_{128}$	3	16	9	4	3	5	3	1	1	1	1	.
$11648_4 = \chi_{129}$	3	16	9	4	2	5	2	1	2	1	1	.
$11648_5 = \chi_{130}$	3	16	9	4	2	5	2	1	2	1	1	.
$11648_6 = \chi_{131}$	3	16	9	4	2	5	2	1	2	1	1	.
$14040_1 = \chi_{132}$	5	20	12	5	4	7	3	2	1	2	1	.
$14742_1 = \chi_{133}$	2	10	5	2	2	4	3	1	1	1	.	1
$14742_2 = \chi_{134}$	2	10	5	2	2	4	3	1	1	1	.	1
$14742_3 = \chi_{135}$	2	10	5	2	2	4	3	1	1	1	.	1
$16640_3 = \chi_{136}$	6	21	13	8	1	6	2	1	4	2	1	.
$16640_4 = \chi_{137}$	3	16	9	3	3	6	4	2	1	1	.	1
$17472_2 = \chi_{138}$	4	14	9	3	2	5	2	3	1	2	.	1
$17920_3 = \chi_{139}$	6	25	16	8	3	9	3	2	2	3	1	.
$17920_4 = \chi_{140}$	4	17	9	3	3	6	4	2	2	1	.	1
$21840_1 = \chi_{141}$	6	19	12	6	2	7	3	3	2	3	.	1

$$\begin{array}{ll}
\varphi_{16} & = 6_1 \\
\varphi_{17} & = 14_1 \\
\varphi_{18} & = 50_1 \\
\varphi_{19} & = 126_1 \\
\varphi_{20} & = 216_1 \\
\varphi_{21} & = 286_1 \\
\varphi_{22} & = 316_1 \\
\varphi_{23} & = 378_1 \\
\varphi_{24} & = 1260_1 \\
\varphi_{25} & = 1610_1 \\
\varphi_{26} & = 3450_1 \\
\varphi_{27} & = 8316_1
\end{array}$$